

ABSTRACT OF THE DISCLOSURE

An I/O circuit placement method. In the I/O circuit placement method, at least two rows of I/O circuits are placed on a first side of the chip, and each I/O circuit has a head section and a tail section. The placement direction of the head section and the tail section is perpendicular to the placement direction of the I/O circuits in the rows. The semiconductor further has a core circuit disposed on the chip, wherein the rows of I/O circuits are disposed outside the core circuit and are at the periphery of the chip. Due to the I/O circuit placement in the semiconductor device, the present invention reduces the area of the semiconductor chip and fabrication cost.